COPY OF ALL CLAIMS

- 1. A cationic polymer obtained by free-radical copolymerization of
 - (a) from 50 to 70% by weight of one or more monomers of the formula I

$$\begin{array}{c|c}
R^1 \\
CH_2 & X - R^2
\end{array}$$
(1)

X = O, NR¹,

 $R^1 = H, C_1 - C_8$ -alkyl,

 R^2 = tert-butyl,

(b) from 5 to 45% by weight of one or more monomers of the formula II

$$CH_2 \longrightarrow N O$$

$$(II)$$

where n = 1 to 3,

- (c) from 5 to 40% by weight of a monoethylenically unsaturated monomer having at least one amine-containing group where up to 40% by weight, based on (a), (b), and (c), of the monomer (a) can be replaced by a monomer of the formula I where R² = C₂-C₂₂-alkyl.
- 2. A polymer as claimed in claim 1, obtained by free-radical copolymerization of
 - (a) from 51 to 65% by weight of the monomer of the formula I,
 - (b) from 7 to 39% by weight of the monomer of the formula II,

- (c) from 10 to 30% by weight of the amine-containing monomer.
- A polymer as claimed in claim 1, wherein the monomer (a) is tert-butyl acrylate,
 N-tert-butylacrylamide or tert-butyl methacrylate.
- 4. A polymer as claimed in claim 1, wherein the monomer (b) is vinylpyrrolidone or vinylcaprolactam.
- 5. A polymer as claimed in claim 1, wherein the monomer (c) is dimethylaminoalkyl (meth)acrylate or dimethylaminoalkyl (meth)acrylamide.
- 6. A polymer as claimed in claim 1, wherein the monomers of the formula I where $R^2 = C_2 C_{22}$ -alkyl are N-butylacrylamide, N-octylacrylamide, lauryl (meth)acrylate or stearyl (meth)acrylate.
- 7. A method of using the polymers as claimed in claim 1 comprising the step of incorporating into cosmetic preparations the polymers as claimed in claim 1.
- 8. The method as claimed in claim 7 wherein the incorporation is made into a hair spray, foam setting compositions, hair mousse, hair gel or shampoos.
- 9. A cosmetic preparation comprising a polymer as claimed in claim 1 in an amount of from 0.1 to 30% by weight, based on the preparation.
- 10. A process for preparing the cosmetic preparation as claimed in claim 9, said process comprising partially or completely neutralizing said polymer with a monohydric acid.
- 11. The process as claimed in claim 10 wherein the polymer is partially or completely neutralized with a phosphoric acid or an acid mixture containing phosphoric acid.

- A method of using polymers as claimed in claim 16 comprising the step of incorporating said polymers into hair cosmetics.
- 13. A hair cosmetic preparation comprising
 - (a) from 0.2 to 20% by weight of a polymer as claimed in claim 1,
 - (b) from 0 to 10% by weight of a conventional hair-setting polymer,
 - (c) from 0 to 1% by weight of a water-dispersible siloxane-containing compound,
 - (d) from 30 to 99.5% by weight of a solvent or solvent mixture of alcohol and water.
 - (e) from 0 to 60% by weight of a propellant comprising dimethyl ether or propane or butane, and
 - (f) from 0 to 0.3% by weight of a cosmetically suitable additive.
- 14. The method as claimed in claim 7 wherein the cosmetic preparations are cosmetic skin preparations.
- 15. The method as claimed in claim 14, wherein a fatty acid amide is additionally incorporated.
- 16. The polymer as claimed in claim 1 which has a glass transition temperature of > 25°C and a K value of from 25 to 70.
- 17. The polymer as claimed in claim 16, wherein the K value is from 35 to 50.
- 18. The process as claimed in claim 9, wherein said polymer is neutralized with a polyhydric or a polycarboxylic acid.

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19. The process as claimed in claim 9, wherein said polymer is quarternized with a quarternizing agent.